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033072-022.ST25  
SEQUENCE LISTING

# 11

<110> Barak, Larry S.  
Oakley, Robert H.  
Caron, Marc G.  
Laporte, Stephane A.  
Wilbanks, Alyson

<120> Constitutively Desensitized G Protein-Coupled Receptors

<130> 033072-022

<140> US 10/054,616

<141> 2002-01-22

<150> US 60/263,406

<151> 2001-01-23

<160> 12

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 371

<212> PRT

<213> Homo sapiens

<400> 1

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Ser	Glu	Arg	Pro	Gly	Gly	Arg	Arg	Arg	Gly	Arg	Arg	Thr	Gly	Ser	Pro
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 Arg Ser Leu Leu Cys Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly  
 340 345 350  
 Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp  
 355 360 365  
 Thr Ser Ser  
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&lt;210&gt; 2

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; Golden hamster

&lt;400&gt; 2

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 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val  
 35 40 45  
 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile  
 50 55 60  
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr  
 65 70 75 80  
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe  
 85 90 95  
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val  
 100 105 110  
 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys  
 115 120 125  
 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Glu Tyr  
 130 135 140  
 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg  
 145 150 155 160  
 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile  
 165 170 175  
 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp  
 180 185 190  
 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser  
 195 200 205  
 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys  
 210 215 220  
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly  
 225 230 235 240  
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His  
 245 250 255 260  
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly  
 265 270 275  
 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg  
 280 285 290  
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile  
 295 300 305  
 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe  
 310 315 320  
 Ser Thr Leu Lys Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu  
 325 330 335  
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser  
 340 345 350  
 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg  
 355 360 365  
 Ser Gly Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr  
 370 375 380  
 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser  
 385 390 395 400  
 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln  
 405 410 415

## 033072-022.ST25

Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly  
 Ala Gln Pro 420 Leu Glu Leu Cys 425 Ala Tyr Pro Glu Trp Lys Ser Gly  
 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp  
 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro  
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 Gly His Phe 500 505 510 515

<210> 3  
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 <212> PRT  
 <213> Golden hamster

<400> 3

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 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser  
 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val  
 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile  
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr  
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe  
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val  
 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys  
 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Ala Tyr  
 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg  
 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile  
 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp  
 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser  
 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys  
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly  
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His  
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly  
 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg  
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile  
 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe  
 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu  
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser  
 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg

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Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr  
 370 375 380  
 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser  
 385 390 395 400  
 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln  
 405 410 415  
 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly  
 420 425 430  
 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly  
 435 440 445  
 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp  
 450 455 460  
 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro  
 465 470 475 480  
 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp  
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 Gly His Phe  
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<210> 4  
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 <213> Golden hamster

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 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val  
 35 40 45  
 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile  
 50 55 60  
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr  
 65 70 75 80  
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe  
 85 90 95  
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val  
 100 105 110  
 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys  
 115 120 125  
 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp His Tyr  
 130 135 140  
 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg  
 145 150 155 160  
 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile  
 165 170 175  
 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp  
 180 185 190  
 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser  
 195 200 205  
 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys  
 210 215 220  
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly  
 225 230 235 240  
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His  
 245 250 255 260  
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly  
 265 270 275  
 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg  
 280 285 290  
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile  
 295 300 305  
 Leu Cys Trp Leu Pro Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe  
 310 315 320

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Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu  
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser  
 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg  
 Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr  
 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser  
 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln  
 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly  
 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly  
 Ala Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp  
 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro  
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 Gly His Phe

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 <211> 515  
 <212> PRT  
 <213> Golden hamster

<400> 5  
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 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser  
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 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile  
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr  
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Ser Phe  
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val  
 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys  
 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Asn Tyr  
 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg  
 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile  
 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp  
 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser  
 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys  
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly  
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His  
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly

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His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg  
 275 280 285  
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile  
 290 300  
 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe  
 305 310 315 320  
 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu  
 325 330 335  
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser  
 340 345 350  
 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg  
 355 360 365  
 Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr  
 370 375 380  
 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser  
 385 390 395 400  
 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln  
 405 410 415  
 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly  
 420 425 430  
 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly  
 435 440 445  
 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp  
 450 455 460  
 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro  
 465 470 475 480  
 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp  
 485 490 495  
 Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro  
 500 505 510  
 Gly His Phe  
 515

&lt;210&gt; 6

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Rattus norvegicus

&lt;400&gt; 6

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 Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu  
 35 40 45  
 Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser  
 50 55 60  
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr  
 65 70 75 80  
 Cys Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe  
 85 90 95  
 Gly Asn His Leu Cys Lys Ile Ala Ser Ala Ser Val Thr Phe Asn Leu  
 100 105 110  
 Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp His Tyr Leu  
 115 120 125  
 Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val  
 130 135 140  
 Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Met Ala Gly Leu Ala Ser  
 145 150 155 160  
 Leu Pro Ala Val Ile His Arg Asn Val Tyr Phe Ile Glu Asn Thr Asn  
 165 170 175  
 Ile Thr Val Cys Ala Phe His Tyr Glu Ser Arg Asn Ser Thr Leu Pro  
 180 185 190  
 Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe  
 195 200 205  
 Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys  
 210 215 220

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Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Arg  
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 Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Val Ile His  
 260 265 270  
 Asp Cys Lys Ile Ser Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile  
 275 280 285  
 Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe  
 290 295 300  
 Leu Gly Lys Lys Phe Lys Lys Tyr Phe Leu Gln Leu Leu Lys Tyr Ile  
 305 310 315 320  
 Pro Pro Lys Ala Lys Ser His Ser Ser Leu Ser Thr Lys Met Ser Thr  
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 Ala Ser Cys Phe Glu Val Glu  
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 <212> DNA  
 <213> Homo sapiens

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&lt;213&gt; Syrian golden hamster

&lt;400&gt; 9

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gtgggcaaca	tcctgggtcat	cctgtcagtg	gcctgcaatc	ggcacctgcg	gacgcccacc	240
aactacttca	ttgtcaacct	ggccattgct	gacctgctgt	tgagtttcac	agtcctgccc	300
ttctccgcta	ccctagaagt	gcttggctac	tgggttctgg	ggcgcatctt	ctgtgacatc	360
tgggcagcgg	tggacgtcct	gtgctgtacg	gcctccatcc	tgagcctatg	tgccatctcc	420
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&lt;211&gt; 1548

&lt;212&gt; DNA

&lt;213&gt; Syrian golden hamster

&lt;400&gt; 10

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&lt;211&gt; 1548

&lt;212&gt; DNA

&lt;213&gt; Syrian golden hamster

&lt;400&gt; 11

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&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Rattus norvegicus

&lt;400&gt; 12

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